

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA


INTERDEPARTMENT CORRESPONDENCE

FILE STP-187-1(27) Cherokee County
P. I. No. 632850

OFFICE Preconstruction

DATE September 8, 2003

FROM  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO  SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

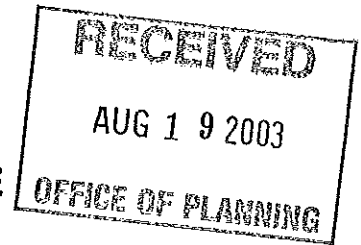
DISTRIBUTION:

David Mulling
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BOARD MEMBER

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE: STP-187-1 (27), Cherokee County
PI No. 632850

OFFICE: Cartersville

DATE: August 18, 2003

FROM: Curtis D. Comer, P.E., District Pre-construction Engineer

TO: Meg Pirkle, Assistant Director Pre-construction

SUBJECT: Revised Project Concept Report

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The proposed project will be constructing left and right turn lanes at all approaches of the intersection of SR 140 and Hickory Road. Also, this project will extend Hickory Rd. 0.4 miles to Batesville Rd. The project will close Batesville Rd. at the intersection of SR 140 and Batesville Rd. (0.3 miles north of Hickory Rd).

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTIP) and/or the State Transportation Improvement Program (STIP).

Date 8/22/03


State Transportation Planning Administrator

Distribution:

David Mulling
Harvey Keepler
Carla W. Holmes
Joseph Palladi
Percy Middlebrooks

REVISED PROJECT CONCEPT REPORT

STP-187-1 (27), Cherokee County
PI No. 632850

Need and Purpose: See attachment.

Project location: This project is the addition of turn lanes on SR 140 and intersection improvements at Hickory Rd. in Cherokee County. This project will extend Hickory Rd. approximately 0.4 miles to tie into Batesville Rd. allowing the existing intersection of SR 140 and Batesville Rd. to be closed. The project will begin approximately 1000 ft. north on Hickory Rd. and end approximately 1000 ft. south of Hickory Rd. for a project length of 0.2 miles.

Description of the approved concept: The project proposes to add left & right turns to all approaches of the intersection. Also, the project will extend Hickory Rd. approximately 0.4 miles to Batesville Rd. Proposed typical will consist of 3 - 12 ft. lanes with 8 ft. shoulders. Traffic will be maintained during construction.

PDP Classification:

Full Oversight (), Exempt (X), SF (), Other ()

Functional Classification: RURAL MINOR ATERIAL

U. D. Route Number(s) none

State Route Number(s): SR 140

Traffic (AADT) as shown in the approved concept:

Current Year (2005): 14000 Design Year (2025): 26000

Proposed features to be revised: The project will begin approximately 1000 ft. north of Hickory Rd. and end approximately 1000 ft. south of Hickory Rd. for a project length of 0.2 miles. The typical section for SR 140 and Hickory Rd. was proposed to be 3 - 12 ft. lanes with 8 ft. shoulders. Project length needs to be increase to cover closing the intersection of SR 140 and Batesville Rd. The typical section for Hickory Road should be revised to 2 -12 ft lanes with 8 ft. shoulders.

Describe the revised feature(s) to be approved: The project will begin approximately 2100 ft. north of intersection of SR 140 and Hickory Rd. (M.P. 22.52) and end approximately 700 ft. south of the intersection (M.P. 23.05) for a project length of 0.53 miles. Also, the typical section Hickory Rd. will be 2 - 12 ft. lanes with 8 ft. shoulders with left and right turn lanes at all approaches.

Updated traffic data (AADT):

Current Year: 14000 Design Year: 26000

Programmed/Schedule:

P. E. – 11-99 R/W: 2003

Construction: 2004

Revised cost estimates:

- | | |
|---|--------------|
| 1. Construction cost including inflation and E&C, - | \$ 1,465,000 |
| 2. Right-of-way, and - | \$ 750,000 |
| 3. Utilities – | \$ 0 |

Is the project located in a Non-attainment area? X Yes ___ No. This project is for the intersection improvements on SR 140 at Batesville Rd. and Hickory Rd. The number of through lanes will be two (2). The proposed open to traffic year will be 2004.

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

1. Sketch Map,
2. Cost Estimate,
3. Other supporting documents.

- Exempt projects

Concur:



Director of Preconstruction

Approve:



Chief Engineer

Need and Purpose
Project STP-187-1(27), Cherokee County
PI No. 632850
SR 140 Improvements at Hickory Road

Background

The Atlanta Regional Commission (ARC) adopted the 2025 Transportation Plan for the 13-county Atlanta Metropolitan area in April 2000. The Plan addresses travel needs through the year 2025. The Regional Transportation Plan (RTP) is the direct result of a comprehensive, cooperative, and continuous planning process conducted by ARC, local governments and the Georgia Department of Transportation in cooperation with the Federal Highway and Federal Transit Administrations. **The proposed project is recommended in the TIP/RTP (CH 195).** The proposed project is scheduled for right of way acquisition in 2003 and for construction in 2004.

State Route 140 in Cherokee County is a major route which is functionally classified as a rural minor arterial, non-NHS. It is a designated school bus route and is not on a bike route. This section of SR 140 is located in a rapidly developing section of Cherokee County. The existing terrain is classified as 'rolling terrain' and the existing road is a two lane rural roadway with a posted speed limit of 55 MPH.

Proposed Improvement

The project will begin approximately 2100 feet north of intersection of SR 140 and Hickory Road and end approximately 700 feet south of the intersection. The project proposes to extend Hickory Road east on new location and tie into Batesville Road. The existing intersection at Batesville Road will be closed due to safety reasons (Batesville Road presently intersects SR 140 at 45 degrees and sight distance is very limited). The improvement will also include left and right turn lanes at all approaches. The total length of the proposed project is 0.53 miles. The proposed improvement would increase safety, by extending Hickory Road and orderly progression of traffic through the intersection, by constructing left and right turn lanes.

Projects in the area

- STP-187-1(25), PI# 632840, SR 140 improvement from Arnold Mill Road to Mountain Road in Cherokee County. Total project length is 1.71 miles. PE was authorized in 11/99. GDOT right of way acquisition is scheduled for 2003. GDOT construction is scheduled for 2004.
- STP-187-1(26), PI# 632845, SR 140 intersection improvement at Sugar Pike Road in Cherokee County. Total project length is 0.40 miles. PE was authorized in 11/99. GDOT right of way acquisition is scheduled for 2003. GDOT construction is scheduled for 2004.
- STP-187-1(28), PI# 632855, SR 140 intersection improvement at Mauldin Road and Univeter Road in Cherokee County. Total project length is 0.40 miles. PE was authorized in 11/99. GDOT right of way acquisition is scheduled for 2003. GDOT construction is scheduled for 2003.

- STP-187-1(29), PI# 632860, SR 140 intersection improvement at Scott Road in Cherokee County. Total project length is 0.30 miles. PE was authorized in 11/99. GDOT right of way acquisition is scheduled for 2003. GDOT construction is scheduled for 2003.
- STP-187-1(15), PI# 721305, Widening SR 140 from Mountain Road to Ranchette Road in Cherokee and Fulton Counties. Total project length is 3.25 miles. PE was authorized in 3/92. GDOT right of way and construction is in long range.
- STP-187-1(17), PI# 621240, Widening SR 140 from Cherokee Road to Mountain Road in Cherokee County. Total project length is 3.30 miles. PE was authorized in 3/92. GDOT right of way acquisition is scheduled for 2007. GDOT construction is scheduled for 2008.

Logical Termini

The termini for this project are logical because the project can stand on its own with no adverse effects on the operational conditions of SR 140 and addresses the safety concerns at this intersection.

Travel Demand and Operational Characteristics

The traffic for 2005 for the proposed project is 14,000 AADT. It is anticipated that traffic will increase to 26,000 AADT by the year 2025. This is an increase in the existing traffic of 86% for this section of roadway.

This intersection would operate in 2005 at Level of Service (LOS) B. By the year 2025 the Level of Service would change to LOS E. The proposed improvement, the addition of the turning lanes, would improve the LOS by providing storage for vehicles making left and right turns, therefore allowing the mainline traffic to flow unimpeded. The relocation of Batesville Road would provide a safer intersection with SR 140.

Safety

In 1995, 1996 and 1997, the last three years in which accident data is available, there were 51 accidents reported along SR 140 at this intersection, exceeding the statewide accident rate per million vehicle miles traveled (MVMT). For the year 1995 the total number of accidents was 11, with 3 injuries and no fatalities. For 1996 the total number of accidents was 21 accidents, with 14 injuries and no fatalities. For 1997 the total number of accidents was 19 accidents, with 14 injuries and no fatalities. Below are accident data and comparable statewide averages:

	1995	1996	1997
Total Accidents	11	21	19
Accidents Per 100 MVMT	1339	1738	1414
Statewide Accidents Per 100 MVMT	200	224	210
Accident Ratio	3.87	7.75	6.73

The accident data indicates SR 140, for this section of roadway, experiences accidents at a rate exceeding the statewide average for similar classified facilities. The majority of the accidents were classified as "angle intersecting" and "rear end" indicating possible issues with the turning movements and the sight distance for this section of roadway. The

addition of left and right-turn lanes and the relocation of Batesville Road to provide a better alignment would reduce the number of accidents at this intersection.

Community issues

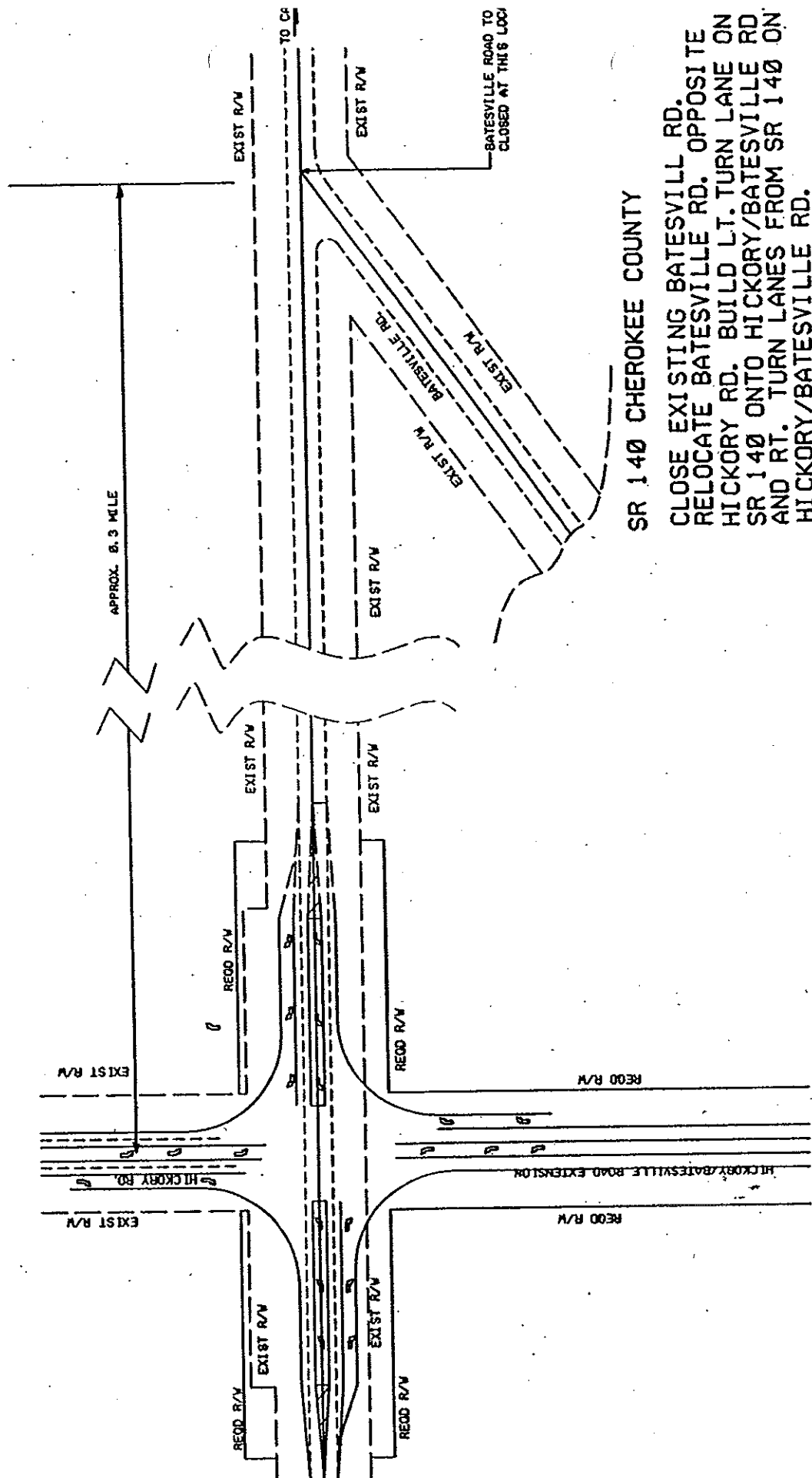
Cherokee County is part of the Atlanta metropolitan area and is a rapidly growing residential area. The 2000 Census listed the population in Cherokee County as 141,903. During the 1990 Census year, Cherokee County had a population of 90,204. Between 1990 and 2000, Cherokee County gained 51,699 residents, a 57.3 percent increase which ranked second in the region with a growth rate of 5.21 percent. The 2010 population projection for Cherokee County is 194,017. In the area of the proposed project less than 10% of the Census Block population lives below the poverty level and less than 20% are minority. These factors would not impact the proposed project.

Need and Purpose

The need of the project is due to the high number of accidents over the 3-year period as shown on the 'Safety' paragraph. The proposed project would provide safer operating conditions and improved local traffic. The purpose of the project is to provide a safer driving environment with an improved intersection that would adequately serve current and future travel demand and provide a better mobility along the corridor.



DATE: 6/1/81
PROJECT NUMBER: SR 140



DIST TRAFFIC OPERATIONS RECOMMENDS
THAT A STOP AND GO TRAFFIC SIGNAL
BE INCLUDED AT THIS LOCATION

NOTE: EXTENSION OF HICKORY/BATESVILLE RD.
IS A PROPOSED COUNTY CONTRACT
FOR APPROX. 0.40 MILES.

2	CHEROKEE	09/11/96	6:49	140	00	22.56	0	1 HEAD ON
3	CHEROKEE	06/10/96	16:53	140	00	22.56	0	0 REAR END
4	CHEROKEE	05/29/96	19:35	140	00	22.91	0	3 ANGLE INTERSECT
5	CHEROKEE	06/07/96	12:07	140	00	22.91	0	1 OVERTURNED
6	CHEROKEE	02/14/96	8:01	140	00	22.91	0	0 ANGLE INTERSECT
7	CHEROKEE	02/26/96	15:16	140	00	22.91	0	0 REAR END
8	CHEROKEE	04/02/96	8:15	140	00	22.91	0	0 REAR END
9	CHEROKEE	11/21/96	18:03	140	00	22.91	0	1 ANGLE INTERSECT
10	CHEROKEE	12/15/96	12:45	140	00	22.91	0	0 REAR END
11	CHEROKEE	04/25/96	7:58	140	00	22.91	0	0 REAR END
12	CHEROKEE	11/30/96	11:50	140	00	22.91	0	0 ANGLE INTERSECT
13	CHEROKEE	12/05/96	15:00	140	00	22.91	0	0 ANGLE INTERSECT
14	CHEROKEE	05/14/96	6:50	140	00	22.91	0	0 REAR END
15	CHEROKEE	09/19/96	8:38	140	00	22.91	0	0 STRUCK OBJECT
16	CHEROKEE	01/10/96	16:41	140	00	22.91	0	0 REAR END
17	CHEROKEE	01/31/96	16:29	140	00	22.91	0	2 ANGLE INTERSECT
18	CHEROKEE	11/05/96	13:00	140	00	22.96	0	3 ANGLE INTERSECT
19	CHEROKEE	05/31/96	10:33	140	00	22.96	0	0 REAR END

ter (Y/N) to see all information about a specific accident : n
 ter (M/N-NO MORE) for more for more accidents : m
 20 CHEROKEE 12/09/96 17:40 140 00 22.96 0 1 REAR END
 21 CHEROKEE 11/21/96 12:10 140 00 22.96 0 2 ANGLE INTERSECT
 22 CHEROKEE 01/10/96 8:36 140 00 22.96 0 1 REAR END
 ter (Y/N) to see all information about a specific accident :

REC NUM	COUNTY	DATE	TIME	RD N S	MILE	F	TOT INJ	TYPE ACCIDENT
1	CHEROKEE	03/17/96	2:55	140 00	22.56	0	0	STRUCK OBJECT
2	CHEROKEE	09/11/96	6:49	140 00	22.56	0	1	HEAD ON
3	CHEROKEE	06/10/96	16:53	140 00	22.56	0	0	REAR END
4	CHEROKEE	05/29/96	19:35	140 00	22.91	0	3	ANGLE INTERSECT
5	CHEROKEE	06/07/96	12:07	140 00	22.91	0	1	OVERTURNED
6	CHEROKEE	02/14/96	8:01	140 00	22.91	0	0	ANGLE INTERSECT
7	CHEROKEE	02/26/96	15:16	140 00	22.91	0	0	REAR END
8	CHEROKEE	04/02/96	8:15	140 00	22.91	0	0	REAR END
9	CHEROKEE	11/21/96	18:03	140 00	22.91	0	1	ANGLE INTERSECT
10	CHEROKEE	12/15/96	12:45	140 00	22.91	0	0	REAR END
11	CHEROKEE	04/25/96	7:58	140 00	22.91	0	0	REAR END
12	CHEROKEE	11/30/96	11:50	140 00	22.91	0	0	ANGLE INTERSECT
13	CHEROKEE	12/05/96	15:00	140 00	22.91	0	0	ANGLE INTERSECT
14	CHEROKEE	05/14/96	6:50	140 00	22.91	0	0	REAR END
15	CHEROKEE	09/19/96	8:38	140 00	22.91	0	0	STRUCK OBJECT
16	CHEROKEE	01/10/96	16:41	140 00	22.91	0	0	REAR END
17	CHEROKEE	01/31/96	16:29	140 00	22.91	0	2	ANGLE INTERSECT
18	CHEROKEE	11/05/96	13:00	140 00	22.96	0	3	ANGLE INTERSECT
19	CHEROKEE	05/31/96	10:33	140 00	22.96	0	0	REAR END

enter (Y/N) to see all information about a specific accident :

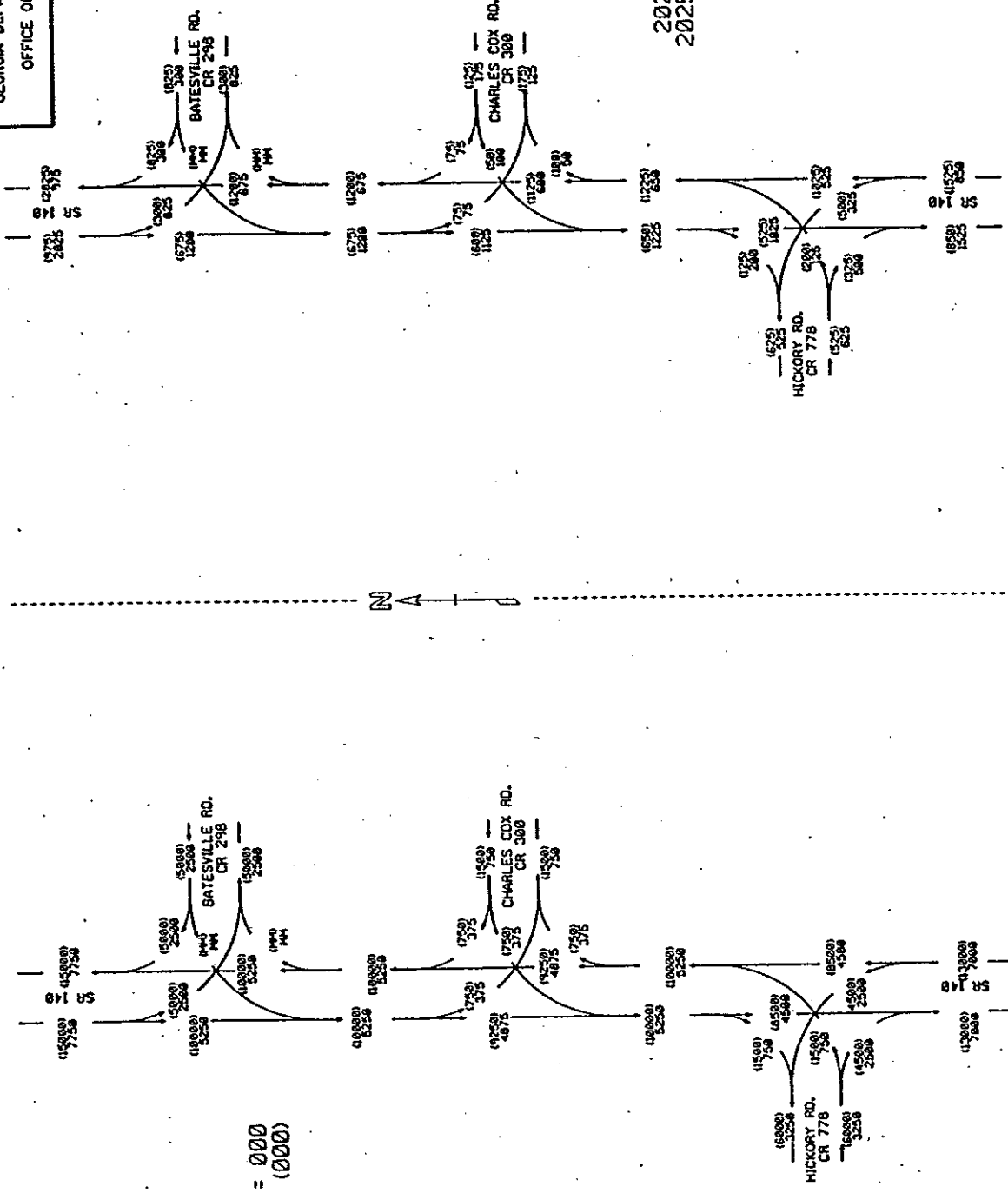
EC UM	COUNTY	DATE	TIME	RD N S	MILE	F	TOT 1	TYPE ACCIDENT
1	CHEROKEE	07/24/98	2:15	140 00	22.56	0	0	STRUCK OBJECT
2	CHEROKEE	04/20/98	8:05	140 00	22.56	0	0	REAR END
3	CHEROKEE	07/16/98	19:17	140 00	22.56	0	0	STRUCK OBJECT
4	CHEROKEE	04/30/98	16:04	140 00	22.56	0	1	REAR END
5	CHEROKEE	04/14/98	17:59	140 00	22.91	0	0	REAR END
6	CHEROKEE	01/15/98	10:40	140 00	22.91	0	0	ANGLE INTERSECT
7	CHEROKEE	03/20/98	8:07	140 00	22.91	0	0	SIDESWIPE OPP D
8	CHEROKEE	03/31/98	13:05	140 00	22.91	0	0	ANGLE INTERSECT
9	CHEROKEE	04/24/98	8:05	140 00	22.91	0	0	REAR END
10	CHEROKEE	08/22/98	5:29	140 00	22.96	0	0	STRUCK OBJECT

Enter (Y/N) to see all information about a specific accident :

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

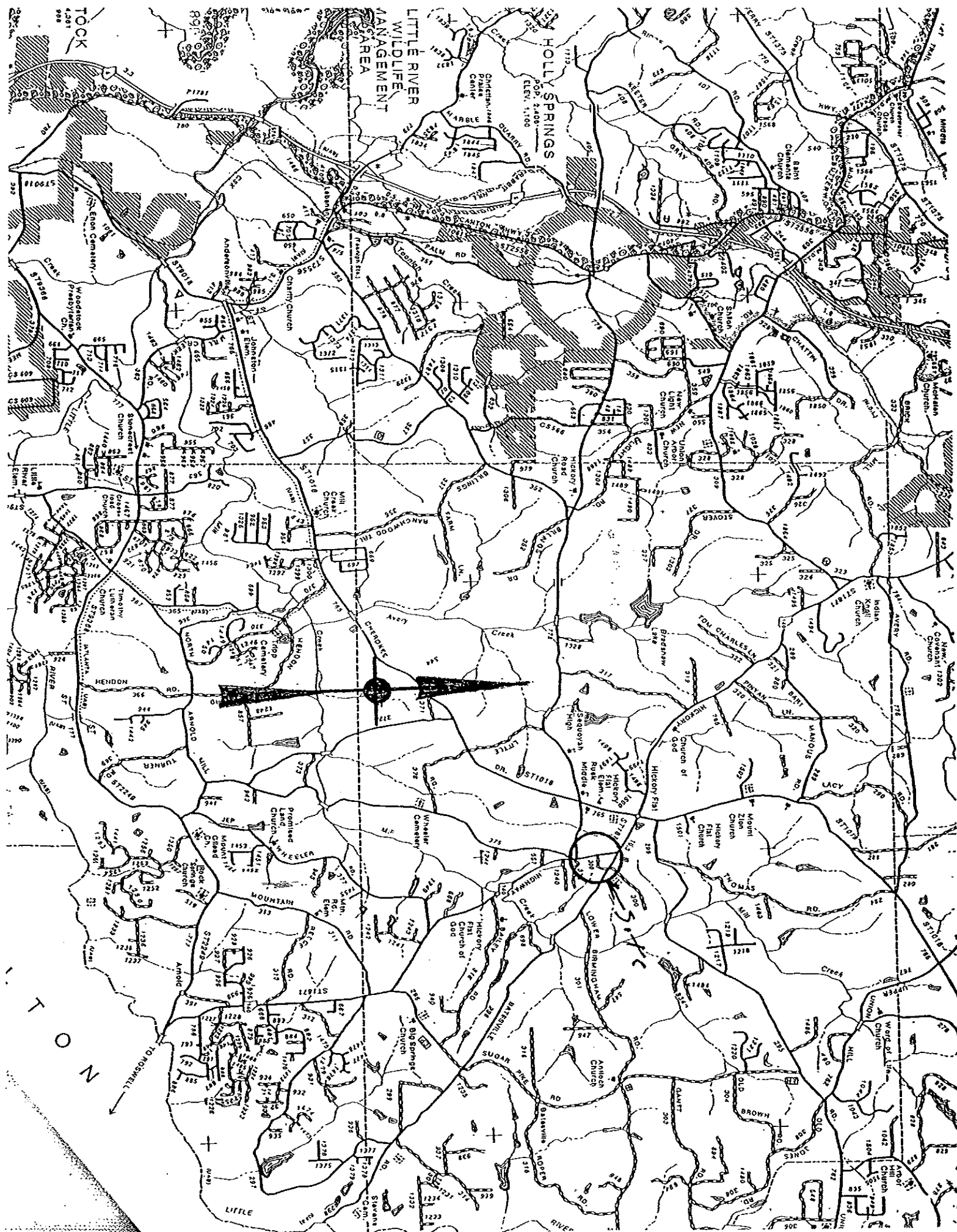
SHEET 1 OF 1

2005 ADT = 000
2025 ADT = (000)



2025 AM DHV = 000
2025 PM DHV = (000)

STP-187-127)
P.I. # 632850
CHEROKEE COUNTY
SR 140 & CR 778
& CR 298
T = 3%
24 HR. T = 5%
S.U. = 4%
COMB. = 1%
R/L
4/8



PRELIMINARY COST ESTIMATE

DATE: March 7, 2003

PROJECT: STP-187-1 (27), Cherokee County

P.I. NO.: 632850

PROJECT DESCRIPTION: This project is the addition of turn lanes on SR 140 and intersection improvements at Hickory Rd. in Cherokee County. This project will extend Hickory Rd. approximately 0.4 miles to tie into Batesville Rd. allowing the existing intersection of SR 140 and Batesville Rd. to be closed. This project is to increase safety and operating efficiency of this section of SR 140.

PROPOSED CONCEPT _____

EXISTING ROAD (If Applicable) _____

TRAFFIC: Existing 14000

Design 26000

() PROGRAMMING PROCES (X) CONCEPT DEVELOPMENT () DURING PROJECT DEVELOPMENT

PROJECT COST

A. RIGHT OF WAY

1. PROPERTY (Land and Easements)	\$ _____
2. DISPLACEMENTS	\$ _____
3. OTHER COSTS	\$ _____

SUBTOTAL \$ See Attached Sheet

B. REIMBURSABLE UTILITIES

1. RAILROAD	\$ _____
2. TRANSMISSION LINES	\$ _____
3. SERVICES	\$ _____

SUBTOTAL: \$ See Attached Sheet

C. MAJOR STRUCTURES

1. WALLS	\$ 0.00
2. BRIDGE STREAM CROSSINGS	\$ 0.00
3. BRIDGE OVER/UNDERPASS	\$ 0.00
4. BOX CULVERTS	\$ 75,000.00
SUBTOTAL	\$ 75,000.00

D. GRADING AND DRAINAGE		
1. EARTHWORK		
55000 Cu. Yds. @ \$4.00 Yd.		\$ 220,000.00
2. DRAINAGE		
a. Cross drain pipes (exc. box culverts)		\$ 10,000.00
b. Curb and Gutter		\$ 6,000.00
c. Longitudinal System (incl. Catch Basins)		\$ 10,000.00
	SUBTOTAL	\$ 246,000.00
E. BASE AND PAVING		
1. AGGREGATE BASE		\$ 175,000.00
7000 tons @ \$25/ton		
2. ASPHALT PAVING		\$ 270,000.00
6000 tons @ \$45/ton		
3. CONCRETE PAVING		\$ 0.00
4. OTHER		\$ 50,000.00
	SUBTOTAL	\$ 495,000.00
F. LUMP ITEMS		
1. TRAFFIC CONTROL		\$ 50,000.00
2. CLEARING AND GRUBBING		\$ 60,000.00
15 acres @ \$4000/acre		
3. LANDSCAPING		\$ 40,000.00
4. EROSION CONTROL		\$ 100,000.00
5. DETOURS (Incl. Temp. Bridges)		\$ 0.00
	SUBTOTAL	\$ 250,000.00
G. MISCELLANEOUS		
1. LIGHTING		\$ 60,000.00
2. SIGNING - STRIPING		\$ 18,000.00
3. GUARDRAIL		\$ 54,000.00
4. OTHER		\$ 10000.00
	SUBTOTAL	\$ 142,000.00
H. SPECIAL FEATURES	SUBTOTAL	\$ 0.00

ESTIMATE SUMMARY

A. RIGHT OF WAY	\$ See Attached Sheet
B. REIMBURSABLE UTILITIES	\$ See Attached Sheet

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES	\$ 75,000.00
D. GRADING AND DRAINAGE	\$ 246,000.00
E. BASE AND PAVING	\$ 495,000.00
F. LUMP ITEMS	\$ 250,000.00
G. MISCELLANEOUS	\$ 142,000.00
H. SPECIAL FEATURES	\$ 0.00
SUBTOTAL CONSTRUCTION COST	\$ 1,208,000.00
E & C (10%)	\$ 120,800.00
INFLATION (5% PER YEAR FOR 2 YEARS)	\$ 136,202.00
TOTAL CONSTRUCTION COST	\$ 1,465,002.00
GRAND TOTAL COST	\$

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STP-187-1(27) **OFFICE** Cartersville
P.I. 632850

FROM Kerry D. Bonner **DATE** July 31, 2001
District Utilities Engineer

TO DeWayne Comer
District Pre Construction Engineer

ATTN William Darby

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimates for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE	LOCAL GOVT. COST
Cobb EMC	No Cost		
Cherokee County Water/Sewer			225,000.00
Canton Water/Sewer	No Facilities		
Atlanta Gas Light	594,500.00		
Georgia Power		70,000.00	
Alltel	24,799.00		
Adelphia	No Cost		
BellSouth	No Facilities		
Totals	\$619,299.00	70,000.00	225,000.00

Total Preliminary Utility Cost Estimate \$914,299.00

If you have any questions, please contact Stanley Horton at 770-382-3616

KDB/RET/lsh

**C: Jeff Baker, State Utilities Engineer;
Herman Griffin, Office of Programming;
James M. Thomason, Area Engineer
File/Estimating Book**

Concept Cost Estimate

R/W

STP-087-1(25) Cherokee County

1.71 Miles - 8.29 Acres

\$1,301,800.00

STP-187-1(26) Cherokee County

3.40 Acres

\$250,000.00

STP-187-1(27) Cherokee County

4.91 Acres

\$750,000.00

STP-187-1(28) Cherokee County

2.02 Acres

\$375,000.00

STP-187-1(29) Cherokee County

1.47 Acres

\$90,000.00